



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 05-861)

In the Application of:)	
)	
Haskell)	Art Unit: Unknown
)	
Serial No.: 10/553,308)	
)	
Filed: October 14, 2005)	Examiner: Not Assigned
)	
Title: Phased Array Antenna System with Adjustable Electrical Tilt)	
)	

Statement of Relevancy of a Foreign Language Reference

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The JP 61172411 reference was cited in an Opposition of European patent application EP 1 239 534 by Radiation Y Microondas, S. A. The reference was cited as disclosing “a multi-stage linear array antenna which pretends to increase the beam tilting effect by setting the first phase shifter for each exciting elements so as to give a beam tilting angle larger than a required value and obtaining a required beam tilting angle by the combined phase shift by the first and second phase shifters so as to reduce a side lobe level produced during prorogation.”

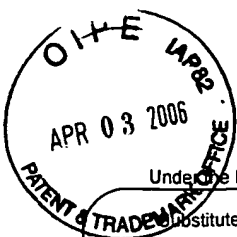
The Okuyama et al. reference was cited in an Opposition of European patent application EP 1 239 534 by Radiation Y Microondas, S. A. The reference was cited as disclosing “a base station antenna products that integrate technologies for beam forming, wind-load shedding and beam tilting. Its drawings show antenna structures serving 120° sectors and phase shifting arrangements.”

Respectfully submitted,
McDONNELL BOEHNEN HULBERT &
BERGHOFF LLP

Dated: March 30, 2006

By:

A. Blair Hughes
Reg. No. 32,901



Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/553,308
Filing Date	October 14, 2005
First Named Inventor	Haskell
Art Unit	Unknown
Examiner Name	Not Assigned
Attorney Docket Number	05-861

Sheet 1 of 6

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		us- 2,041,600	5-19-36	Friis	
		us- 2,239,775	3-2-39	Bruce	
		us- 2,245,660	10-12-38	Feldman et al.	
		us- 2,247,666	8-2-39	Potter	
		us- 2,961,620	11-22-60	Sommers	
		us- 3,277,481	10-4-66	Robin et al	
		us- 3,522,558	1-13-69	Stafford et al.	
		us- 4,241,352	12-23-80	Alspaugh et al	
		us- 4,249,181	2-3-81	Lee	
		us- 4,788,515	11-29-88	Wong et al.	
		us- 4,881,082	11-14-89	Graziano	
		us- 5,281,974	1-25-94	Kuramoto et al.	
		US-			
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	5
		Country Code ³ "Number" ⁴ "Kind Code" ⁵ (if known)				
		WO 89/07837	8-24-89	Wong et al.		
		WO 92/16061	9-17-92	Kangas		
		WO 93/15569	8-5-93	Franza et al.		
		WO 95/10862	4-20-95	Butland et al.		
		EP 0 531 090	3-29-00	Fujil et al.		

Examiner
SignatureDate
Considered

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		Country Code ³ "Number" ⁴ "Kind Code" ⁵ (if known)				
		EP 0 575 808	12-29-93	Hadzoglou et al.		
		GB 1 314 693	4-26-73			
		AU 38746/93	7-29-93	Butland et al.		
		AU 664625	11-23-95	Mews		
		JP 02-174302 - abstract	7-5-90	Nippon Telegraph		

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		Country Code ³ "Number" ⁴ "Kind Code" ⁵ (if known)				
		JP 04-320121 abstract	11-10-92	Nippon Telegraph		
		JP 04-320122 abstract	11-10-92	Nippon Telegraph		
		JP 05-37222	2-12-93	NEC Corp		X
		JP 05-075340	3-26-93	Hitachi Chem Co.		
		JP 05-121902	5-18-93	Nippon Dengiyou		

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Sheet 4

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		Country Code ³ "Number" ⁴ "Kind Code" ⁵ (if known)				
		JP 05-121915	5-18-93	Sumitomo Electric		
		JP 61-172411	8-4-86			
		JP 61-006901	1-13-86	Kokusai Denshin		X
		JP 140985	5-20-94	Fujitsu Ltd		X
		JP 06-196927	7-15-94	NTT Idou Tsuushinmou		X

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Application Number	10/533,308
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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁵
		Country Code ³ "Number" ⁴ "Kind Code" ⁵ (if known)				
		JP 06-260823	9-16-94	Mitsubishi Electric		X
		JP 06-326501	11-25-94	Sumitomo Electric		X

Date
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		Application Number	10/553,308
		Filing Date	October 14, 2005
		First Named Inventor	Haskell
		Art Unit	Unknown
		Examiner Name	Not Assigned
Sheet 6	of 6	Attorney Docket Number	05-861

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Strickland, Peter "Microstrip Base Station Antennas for Cellular Communications", IEEE, pp. 166-171 (1991)	
		Bacon, "Variable Elevation Beam-Aerial Systems for 1 1/2 Metres", Journal IEE, pp. 539-544 (1946)	
		Forster, et al. "A Conical Beam Ship Array Antenna with Infinitely Variable Control of the Elevation Angle", pp. 17-20 (1973)	
		Hansen, "Microwave Scanning Antennas" Vol. 3 Array Systems, pp. 2-7 (1966)	
		Smith, textbook: "Circuits, Devices and Systems", A First Course in Electrical Engineering", 4 th Ed., pp. 680-681 (1984)	
		Okuyama et al., "Base-Station Antenna Systems for Car and Handheld Cellular Phones", Mitsubishi Denki Giho, Vol. 68, no. 12, pp. 23-26 (1994)	
		Sumitomo Technical Review, September (1993)	X
		Brochure, "Brown Boveri Phaser for the Horizontal Slewing of Curtain Antennas", Boveri & Cie AG, Mannheim, RFA Classif. n° 1601/242	
		CEL-901 Cellular Antenna Controller User's Manual", issued on 2 April 1992, in the name of CAL Corporation (1991)	

Examiner Signature	Date Considered
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